AGENDA
Urban Atmospheric Observatory (UAO)
PLANNING MEETING
Sponsored by
Defense Threat Reduction Agency (DTRA)
Goddard Institute for Space Studies (GISS)
23-24 February 2004

MONDAY 23 Feb 2004

8:00 - 8:30 Breakfast

8:30 - 9:30 Welcome
Jim Hansen, NASA/GISS
George Hendrey, BNL
James Rafferty, DTRA
Cynthia Rosenzweig, NASA/GISS

UAO Overview--long-term goals (Presentations: 20 min + 10 min discussion)

9:30 - 10:00 **Michael Reynolds** (Brookhaven National Laboratory)
UAO, Where We Are: Issues and Stakeholders. Science versus Office of Emergency Management (OEM) needs.

10:00 - 10:30 **Robert Bornstein** (San Jose State University), UAO Chief Scientist
UAO science over-view and charge to four working groups.

10:30-11:00 Coffee

Reviews of Charges to Working-group (15 min + 15 min discussion)
Working group chairs outline discussion topics for their groups.

11:00-11:30 **Tom Warner** (National Center for Atmospheric Research)
Group 1 topic: Mesoscale: From Observations to Forecasts
Specific discussion topics for group:
- What are needed parameters
- Observations and instruments: existing networks and required new sites
- Vertical measurements: sondes and remote sensors
- Data collection strategies
- Real time mesomet models
- 4DVAR: models and emergency management
- Linkage to canyon scale dispersion models
- Forecast support to IOP studies: “go” versus “no go”
- Urban research challenges for future
- Where will UAO be in 2010

11:30-12:00 **Michael Brown** (Los Alamos National Laboratory)

Group 2 topic: Microscale: Urban Canyon Observations and Models

Specific discussion topics for group:

- Quasi-permanent networks
- Required Dispersion (transport and diffusion) parameters
- Observations and instruments: 2-vs 3-D anemometers, sonics, cups
- Placement, sample/averaging parameters
- Model overview: needs vs. model types
- Complex models: CFD, QUIK, FLACS, etc.
- Real-time dispersion models: UDM, NARAC, etc.
- Linkage to mesomet models
- Urban research challenges for future
- Where will UAO be in 2010?

12:00-12:30 **Paul Lioy** (EOHSI - Robert Wood Johnson Medical School)

Group 3: Quasi-Real time/Mobile Personal Monitoring Data and Modeling for Emergency Management

Specific discussion topics for group:

- Communication and data availability
- Data: metadata, collection, QC, archive
- Standards: base maps, time, orientation, elevation
- Tailored dissemination
- Use in forecast models
- Available hardware and software
- Challenges for immediate future
- Where will UAO be in 2010

12:30-13:30 On-site lunch provided

13:30-14:00 **Steve Hanna** (Harvard School of Public Health)

Group 4: Intensive Operation Periods (IOPs): MSG-04 and -05

Specific discussion topics for group:

- Science goals for Madison Square Garden 2004
  - Deep-canyon building-scale dispersion
  - Rapid dispersion up building-faces
- Beyond previous urban studies
- Tracer release sites, sampler locations, background, contamination
- Release scenarios: sampling and integration times
- Meteorological support: rooftop and canyon stations
- Indoor issues and subways
- Synoptic and meso forecasts: two-day ahead for SW wind
- Expanded MSG-05 study: goals, scope, and cost
- Benefits to NYC OEM

14:00-14:30 Coffee

14:30-17:30 Working-group breakout session

Individual breakout areas provided. Working group chairs lead discussions aimed at production of a written section of draft UAO project-planning document.

19:00 Group dinner at Ruby Foos (Broadway and 77th Street)

TUESDAY 24 Feb 2004

Finalization of draft UAO project-planning document. Breakout sessions and session-reports continue.

8:00-8:30 Breakfast

8:30-9:00 Special report: John Pace, DTRA Chem-Bio will review the DTRA efforts in CBRN sensors, sensor fusion, and related topics.

Session up-date reports (15 min presentation & 15 min discussion):

9:00-9:30 Mesoscale

9:30-10:00 Microscale

10:00-10:30 Real-time data and emergency management

10:30-10:45 Coffee

10:45-11:15 IOPs: MSG

11:15-13:00 Breakout sessions resume

13:00-14:00 Lunch (On-your-own) + prepare session reports

Final Topic Reports

14:00-14:30 Mesoscale

14:30-15:00 Microscale

15:00-15:30 Real-time data and emergency management

15:30-16:00 IOPs: MSG

16:00-16:45 Open forum

16:45-17:00 **Closing and copious thanks to all**